

REMARKS

Claims 1-3, 5, 7-11 and 23- 24 remain before the Examiner for reconsideration. Claims 1, 10 and 11 have amended. Claims 4 and 6 has been canceled. No new matter has been added and the claims amendment are fully supported in the specification and drawings as originally filed.

REJECTIONS UNDER 35 USC 112

Claim 1 stands rejected under 35 USC 112, first paragraph, for failing to comply with the writtem description requirement. This rejection should be withdrawn in view of the remarks made herein.

The Office Action alleges that:

The claims contain subject matter that was not described in the specification in such, a way to reasonably convey to one skilled in the relevant art that the inventors has possession of the claimed invention. The "at least one attachment member disposed on the rear end or front end of the tubular body". Office action alleges that the original disclosure does not support the limitation that the attachment member may be disposed on the front end of the tubular body. However, Fig 16 as filed in the original specification illustrates this embodiment.

Reconsideration is requested.

REJECTIONS UNDER 35 USC 102

Claim 14 stands rejected under 35 USC 102(b) as being anticipated by Armbruster et al (USPN 5322511), (hereinafter) "Armbruster". This rejection should be withdrawn in view of the remarks made herein.

Office Action alleges that Armbruster et al discloses a syringe (1) having a body (12), a plunger (48), an attachment member (92) at a rear end, at least one rotation member (94) comprising at least one notch on the terminating edge of the rearward end (Fig. 12, 16). The notch forming a discontinuous edge at the terminating end of the tubular body and extending through the syringe way from an inside to an outside (94, Fig. 12, 16; where the examiner notes that the "inside to an outsdide" has no reference

point – i.e. inside of the syringe reservoir to an outside environment), and the terminating edge extends in an axial direction forming a continuous axial surface from the rearward end of the tubular body (90/92, Fig 16; the examiner notes, what forms the continuous axial surface of the terminating edge has not been specified and could mean an outer perimeter or inner perimeter (i.e. where 92 meets the cylindrical syringe body).

Claim 14 is directed to a syringe and includes "at least one rotation member comprising at least one notch defined in the terminating edge of the rearward end of the tubular body for releasably retaining a corresponding member of the syringe retaining mechanism of the injector, wherein the notch forms a discontinuous edge at the terminating end of the tubular body and extends through the syringe wall from an inside to an the outside, wherein the terminating edge extends in the axial direction forming a continuous axial surface from the rearward end of the tubular body." Armbruster is directed to a syringe having a flange 92 that extends in the radial direction. At the end of the flange that exends in the radial direction away from the syringe body, there is a recess 94. Thus, Armbruster does not disclose any recesses in the axial portion of the syringe body, but rather at the terminating end of the flange which is radially away from from the body. Accordingly, Armbruster does not disclose the structural features of Applicants' invention of Claim 14. Reconsideration is requested.

Accordingly, Armbruster does not disclose all of the structural features of Applicants' invention of Claim 14. Reconsideration of this rejection is requested.

#### REJECTIONS UNDER 35 USC 103

1. Claims 1-11 and 22-24 stand rejected under 35 USC 103(a) as being obvious over Reilly (6958053). The rejection should be withdrawn in view of the remarks and amendments made herein.

The Office action indicates that :

the applied reference has a common assignee with the instant application.  
Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention

disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321 (c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(1)(1) and § 706.02(1)(2).

Office Action alleges that Reilly et al teaches a syringe for use with an injector comprising a body (600; Fig 5a-b), a plunger (50), an attachment member (inclined surface 630) at the rear end of the body for retaining a corresponding mechanism on the injector (Fig 5a-b). The attachment member is an annular ridge (630) which is also a projection or tab member.

Claim 1 has been amended and includes feature of "wherein the at least one attachment member comprises one or more flexible tab members, wherein each of the flexible tab members comprises a first tab end attached to the tubular body and extending in the axial direction and a second tab end terminating axially from the tubular body and adapted to engage the syringe retaining mechanism of the injector, wherein each flexible tab member flexes at the second tab end"

Reilly does not teach or suggest these features of Applicants' invention. Rather, Reilly is directed to a syringe having a mounting flange 630. The mounting flange is fixedly attached to the syringe body and rigidly supported against the syringe body around the entire surface. Reilly does not disclose the flexible tab members of Claim 1.

The Office Action indicates that Reilly et al does not teach an encoding device located on the body of the syringe. Hitchins teaches a syringe body (50) for use with an injector (20) where the syringe includes a coding ring (190,192) discontinuous with the tubular body and formed circumferentially around at least a portion of the rear end of the body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the known technique of an encoding ring on a syringe with the device of Reilly in order to provide an indication of the medication contained with the syringe or the size of the syringe, for example.

Claim 1 also has been amended to include that: "at least one encoding ring formed circumferentially around at least a portion of the rear end of the tubular body and operable to provide syringe information to the injector." This is very different from Hitchins that discloses mounting flanges 170, 170' extending from the syringe body in the radially directly and at the outward ends having depression 190 or 192. These depression are not rings formed on any portion of the tubular body. The mounting flanges merely connects to the syringe body and the depressions are located a distance away from the syringe body on the flanges. Thus, Hitchins or Reilly, either alone or in combination do not teach or suggest Applicants' invention of Claim 1.

Regarding claims 10 and 11, the Office Action alleges that depending on the orientation of the powerhead of the injector, the attachment member could be moved in either an axial or a vertical direction. Claims 10 and 11 have been amended and support can be found in the specification as originally filed. Reconsideration is requested.

Further, neither Hitchins nor Reilly, teach or suggest Applicants' invention of Claims 1-3, 5, 7-11 and 23- 24. Also, Claims 1-3, 5, 7-11 and 23- 24 depend from Claim 1, which as discussed is believed to be allowable. Accordingly, Claims 1-3, 5, 7-11 and 23- 24 are also believed to be allowable. Reconsideration of the rejections of Claims 1-3, 5, 7-11 and 23- 24 is requested.

2. Claims 1-11 and 22-24 stand rejected under 35 U.S.C. 103(a) as being obvious over Rhinehart et al (US 5947935) in view of Hitchins et al (US 5,944,694). The rejection should be withdrawn in view of the remarks and amendments made herein

The Office Action alleges that:

Rhinehart et al teaches a syringe for use with an injector comprising a body (20; Fig 1), a plunger (50), an attachment member (inclined surface 120 and shoulder/ridge 126) at the forward end of the body for retaining a corresponding mechanism on the injector (133). See Fig 10/11. The attachment member is an annular ridge (126) which is also a projection or tab member. See Fig 10. Regarding claim 8, 9, see flange 132.

As discussed, Claim 1 has been amended and includes that "wherein the at least one attachment member comprises one or more tab members, wherein each of the tab

members comprises a first tab end attached to the tubular body and extending in the axial direction and a second tab end terminating axially from the tubular body and adapted to engage the syringe retaining mechanism of the injector." The support for this amendment can be found in the specification and drawings, including Fig.'s 16, 10, 11 and 14-24. Non-limiting examples of the tabs 30, 190.

Rhinehart, does not disclose these novel structural features of applicants' invention. Rather, Rhinehart includes a mounting flange 26 positioned on the rear of the syringe 20. The entire mounting flange is located on the surface of the rear of the syringe and extends along the syringe body, thus there is no "second tab end terminating axially from the tubular body." In fact, the both ends are fixed to the syringe body. Accordingly, Rhinehart does not teach or suggest these features of Applicants' invention. Further, Reilly does not remedy these deficiencies. Therefore, neither Rhinehart or Reilly, alone or in combination, teach or suggest applicants' invention of Claim 1. Furthermore, they do not teach or suggest features of Claims 2-11 and 22-24. Claims 1-11 and 22-24 are believed to be allowable and reconsideration is requested.

The Office Action alleges that in reference to claims 10 and 11:  
depending on the orientation of the powerhead of the injector, the attachment member could be moved in either an axial or a vertical direction. Claims 10 and 11 have been amended and Rhinehart does not teach or suggest such features to allow the tabs to move relative to the syringe body.

Although the Office Action alleges that Hitchins teaches a syringe body (50) for use with an injector (20) where the syringe includes coding (190,192), coding 190, 192 are expressly disclosed as recesses and they are provided discontinuously on the circumference of the syringe body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the known technique of an encoding ring on a syringe with the device of Reilly in order to provide an indication of the medication contained with the syringe or the size of the syringe, for example. As discussed above, Hitchins does not teach this feature of Applicants' invention, including "at least one encoding ring formed circumferentially around at least a portion of the rear end of the tubular body and operable to provide syringe information to the injector."

either in alone or in combination with Rhinehart. Thus, Claim 1 is believed to be allowable.

Further, Claims 1-3, 5, 7-11 and 23- 24 depend from Claim 1, which as discussed is believed to be allowable. Accordingly, Claims 1-3, 5, 7-11 and 23- 24 are also believed to be allowable. Reconsideration of the rejections of Claims 1-3, 5, 7-11 and 23- 24 is requested.

In view of the above remarks, the Applicants respectfully request that the Examiner withdraw the rejections of the claims, indicate the allowability of the claims and arrange for an official Notice of Allowance to be issued in due course.

Respectfully submitted,

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